

**Class X
Science**

IMPORTANT QUESTIONS FOR CARBON COMPOUNDS

- Q1. Name the classes of the organic compounds represented by the following formulas:
- a) $C_2H_5NH_2$
- b) $CH_3 - C - CH_3$
 $\quad \quad \quad \parallel$
 $\quad \quad \quad O$
- Q2. What is meant by fermentation? Write chemical equations showing the two steps involved in preparing ethanol by fermentation of molasses [sugar].
- Q3 Name the products formed when:
- a) Ethanol is oxidized by an alkaline solution of $KMnO_4$
- b) Propanone and Hydrogen Cyanide [HCN]
- c) Sodium Ethanoate is heated with soda lime.
- d) Methanol is reduced with hydrogen in presence of finely divided palladium [Pd]
- Q4 Beside large molecules what is the essential similar structural character of all polymers. Give each of:-
- a) addition polymer
- b) condensation polymer
- Q5 State the monomers used and one use for each of the following;
- a) Neoprene
- b) Natural Rubber
- c) Teflon
- d) Nylon
- e) Polythene
- Q6 Complete the following reaction equations:
- a) $CH_3CH_2OH + Na \rightarrow$
 $H \setminus$
- b) $C = O + HCN \rightarrow$
 $H /$

- Q7 How is it that we can use detergent for washing clothes even then the water is hard but not soap? What changes has been made in the composition of detergent to make it biodegradable?
- Q8 What is a polymer? How have polymers been classified? Name one polymer for each of the following application:
- for insulation of electric wires.
 - for nonstick coating on kitchen utensils.
 - for blending of cotton to make shrink resist clothes.135